

Fear Before
& 3OH!3
Concert Reviews
see pages 8&9

WEB EXCLUSIVE:
CULTURAL DIVERSITIES
WITH GEORGES
NGONYANI
SEE OREDIGGER.NET

GAMER'S UNITE! CHECK OUT
SUSTAINABILITY THE BLOGS AT
TECH BREAK OREDIGGER.NET

A cool way to detect neutrinos: Using Antarctica for astrophysics

Benjamin M. Weilert
Staff Writer

For decades, cosmic rays have been misunderstood and regarded as mysterious. After all, Marvel comics' "Fantastic Four" characters obtained their powers by interactions with cosmic rays. However, such particles are difficult to detect because they will pass through most everything. Dave Z. Besson of the University of Kansas gave a lecture last Tuesday on how scientists are using Antarctica to measure cosmic rays, through detection of neutrinos.

"We're trying to construct a telescope, which is based not on detection of visible light particles, but detection of neutrinos as tracers of astrophysical sources," Besson explained. The most common forms of neutrinos are produced by the sun through the nuclear reactions that happen there. Unfortunately, since neutrinos easily pass through matter, they are difficult to measure. "Since they're so

penetrating, how do we measure them?" asked Besson.

The chances of detecting a hit are much greater when a large target is used. "We use the arctic ice cap as our large target," explained Besson. With such a large surface area, the chances of detecting neutrinos are increased. The other reason that Antarctica is used as a detector is due to the properties of the ice that covers the continent.

Ice is virtually transparent to radiation, which means that it will not absorb any produced on or underneath the ice. "When neutrinos crash into solid material, radiation is produced," Besson said. Since the ice does not absorb any of the radiation produced by the neutrino collision, the chances of detecting a neutrino are high.

The reason behind detecting neutrinos instead of trying to detect other cosmic ray particles is due to the energy levels of neutrinos. Besson explained, "Neutrinos cover a very large energy range." Photons and protons are not

as easy to detect as neutrinos, despite having similar properties. "Both photons and protons have a problem of being attenuated by material in interstellar space." Therefore, these two particles will be absorbed long before they can reach Antarctica, whereas neutrinos will keep going, due to their large energy range.

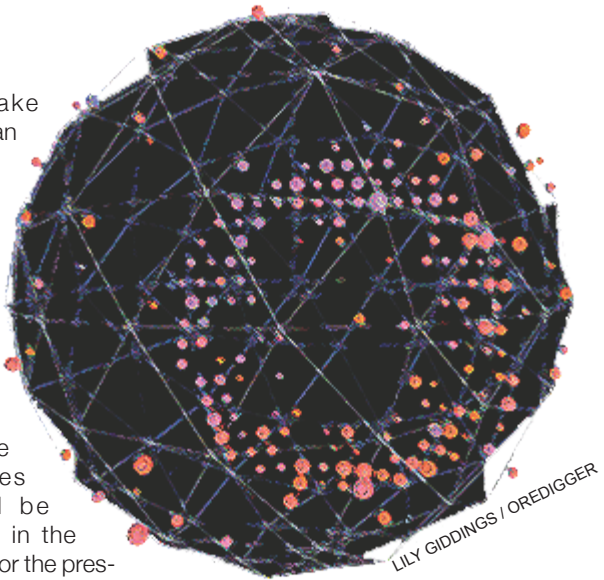
In order to detect the radiation of the collided neutrinos, holes have to be drilled into the Antarctic ice. With a picture of one of these holes displayed on the screen behind him, Besson said, "Drilling these holes is a major operation." Due to the properties of the ice and the ambient temperature, large amounts of hot water are needed in order to get the holes to the needed depth. However, drilling the holes for the sensors is only part of the difficulty of setting up the experiment.

So, as not to waste any time while down in Antarctica, the equipment must be tested ahead of time. "We have to test our hard-

ware to make sure that it can withstand very high pressures." In order to do these tests, local grocery store freezers were utilized to obtain the temperatures that would be encountered in the field. Testing for the pressure tolerance of the hardware follows the same principle of a full pop can exploding when placed in the freezer: water expands when it freezes. With the conditions found in Antarctica, it's no wonder why the equipment must be sturdy. "The pressures are about as much as six atmospheres," said Besson.

Through the ability to detect neutrinos, astronomical research

can be done with regard to the composition of the stars and other extraterrestrial entities. Besson ended his lecture with a pitch to join the team down in Antarctica, "If you've ever wanted to experience frostbite, long, lonely days with no links to civilization, a barren, desolate and foreboding landscape, then this could be the opportunity you've been waiting for."



LILY GIDDINGS / OREDIGGER



Apple's new line of Macbooks

Ian Littman, Tech Break Columnist

Combining the aluminum-and-glass design of the iMac with the manufacturing process of the Macbook Air, the new Macbook line from Apple looks stunning. I was able to borrow a review unit of the Macbook Pro from our own book store, who sells the computers, to see what the hype was all about. I must say, it's a nice looking computer, though the premium above a last-generation Macbook Pro may be too much to justify it.

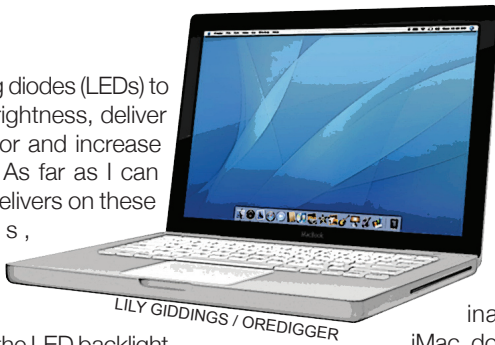
The first feature of this notebook, as with all Apple products, is the aesthetics and industrial design. Following Steve Jobs' minimalist lead, the design of this computer practically shouts "less is more." A handful of ports on the left, a keyboard, touchpad and power button on the bottom half, a screen and hidden iSight webcam on the top half and a slot-loading optical drive on the right are all this notebook contains. This simplicity, allied with the machined-aluminum construction, yields a computer a shade thinner than the last Macbook Pro

(0.95" versus 1.0" thick) and noticeably lighter, at 5.5 pounds. On the other hand, the Macbook Pro feels just as "dense" as every other Macbook I've picked up (including my three-pound Macbook Air); when you're putting a lot of components into an enclosure that thin, you feel it. But that's fine with me. In this case, "dense" equates to "solid." By the way, as with all Apple products, aesthetics are spot on. I'd go so far as to call this notebook "futuristic" in design. One interesting fact: the Macbook Pro is slightly longer and wider than your average PC notebook to somewhat make up for its rather insane lack of thickness, though the difference isn't enough to make a notebook-centric backpack obsolete.

The most obvious feature of the Macbook Pro is its 15.4-inch, glass-covered, black-bezeled, LED-backlit screen. It's slightly higher-resolution than the 13.3-inch displays found on the Macbook Air (1440x900 vs. 1280x800), but otherwise the concept is similar: use

light emitting diodes (LEDs) to pump up brightness, deliver spot-on color and increase battery life. As far as I can tell, Apple delivers on these promises, though due to the larger screen size the LED backlighting is slightly dimmer than that of the Macbook Air. Still, the screen can be turned up bright enough for use even in outdoor situations. Battery life also gets a nice bump from the LED display; more on that later.

The second-biggest feature of this computer is the keyboard. I must say that I'm rather disappointed. It looks as though Apple merely lifted the keyboard from the Macbook Air and plopped it down on the rest of its notebook line. To me, however, the keyboard seems more like a Macbook keyboard than the one from my Macbook Air. The keys lack the tactile feedback that allows an experienced typist to get words down onscreen at



LILY GIDDINGS / OREDIGGER

an alarming rate, something the Macbook Air does slightly better and the aluminum Apple keyboard, originally from the iMac, does quite well.

There's also the "chiclet" issue. While cute-looking, anyone moving from a more typical keyboard layout is in for a bit of a surprise when using the new system. It's not that bad after you get used to it, but a year later, I can pick up a well-designed keyboard (like the one on the Lenovo IdeaPad I talked about a few weeks ago) and type 20% faster than I do on my iMac's aluminum unit. The real problem here is that we're talking about a notebook keyboard; you can't swap it out for something else without losing portability. In short, it's not a flex-ridden, bouncy horror show of an input device, but the keyboard on this \$2000 computer is bested

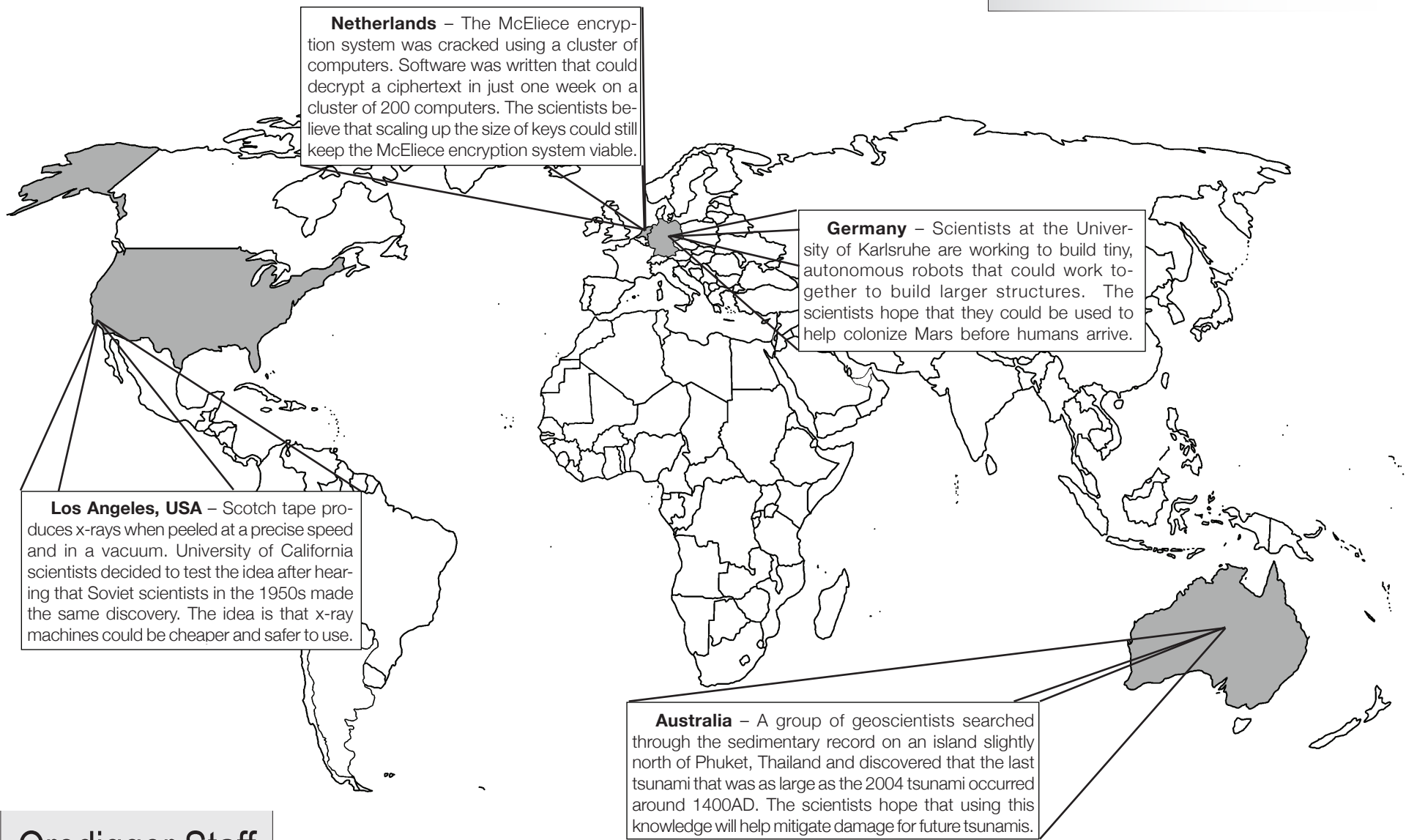
by anything from Lenovo (Thinkpad or IdeaPad).

The third big feature? The button-less touchpad. It's actually a little more intuitive than you'd think; just press near the bottom of the trackpad and it clicks by rotating ever so slightly downward. Since the top of the trackpad is the pivot point, you'll be pressing where you used to. At any rate, the touchpad is incredibly huge, and it needs to be; it now supports four-finger gestures, which I find moderately useful. One big problem though is click sensitivity. The glass touchpad (which feels close enough to previous touchpads that you wouldn't know it was glass unless someone told you so) may or may not register a "button press," at least on the review unit I got. The solution? Tap to click, which the system does quite well. Then again, this is a QA issue that seems widespread across the new Macbook Pros, so if you like tactile touchpad feedback be prepared to swap out your Macbook Pro if it exhibits this problem.

SEE MACBOOK ON PAGE 4

Scientific discoveries this week

Zach Boerner, Copy Editor



Oredigger Staff

Sara Post
Editor-in-Chief

Lily Giddings
Managing Editor

Zach Boerner
Copy Editor

Josh Elliott
Business Manager

Amanda Graninger
Design Editor

Ryan Browne
Webmaster

Cericia Martinez
Asst. Design Editor for Layout

Tiffany Turner
Asst. Design Editor for Style

Abdullah Ahmed
Asst. Business Manager for Sales and Marketing

Mike Stone
Fool's Gold Content Manager

Jason Fish
Content Manager

Kevin Duffy
Content Manager

Tim Weilert
Content Manager

Matthew Pusard
Content Manager

David Frossard
Faculty Advisor

Headlines from around the world

Emily Trudell, Staff Writer

NASA suffered yet another setback in its fifth and final repair mission to the **Hubble telescope** after an on-board computer failed.

Randall Hofland, a gunman who was on the lam for over a week, held a classroom of fifth graders hostage at Stockton Springs Elementary School before he was tackled by police.

In the midst of one of the worst economic quarters in history, Japan's Prime Minister **Taro Aso** revealed a second **economic stimulus** package that promises five trillion yen for decreasing tolls and loan coverage.

Islamic parties in the nation of **Indonesia** passed an **anti-pornography** bill that will ban images and gestures that can be interpreted as pornographic, in order to protect the women and children from exploitation. The bill awaits the president's signature.

Israel's Prime Minister **Ehud Olmert** made plans for more peace talks with **Syria**; current talks are being held through Turkish mediators.

Former British Prime Minister **Tony Blair** has earned a reported 20 million dollars from speeches and seminars he has made since leaving office in 2007.

After a **gas explosion** last week at the Yaotou mine in Shaanxi province of **China**, 26 of the 36 missing miners have been confirmed dead, while six others remain unaccounted for.

Iraqi officials unveiled their budget for the 2009 fiscal year; they plan to cut 13 billion dollars

from the budget as **oil prices** continue to drop. Oil was traded at under 65 dollars per barrel last week.

Police precincts in **Delaware** have begun to see a sharp rise in the number of crimes committed with **fake guns**.

Geological studies of undersea tectonic motion revealed that the 2004 tsunami that killed 230,000 people was the largest of its kind in the Indian Ocean for at least 600 years. Evidence showed that a **tsunami** of equal size occurred between 1300 and 1400 AD.

A **recent study** of politicians showed that the success of male politicians is based mainly on the public's perception of their competency, while the success of **female politicians** was based on their perceived attractiveness.

As the national percentage of Americans who are obese or overweight has risen over the last decade, the rate of newly reported **diabetes**

cases has doubled.

Two **white supremacists** were accused of plotting a killing rampage ending in the assassination of Presidential hopeful **Barack Obama**. They are being kept in custody on charges of carrying an illegal firearm, planning to steal weapons and planning to assassinate a presidential candidate.



Environmental Science and Engineering Lecture: Nuclear desalination and water shortages

Spencer Nelson
Staff Writer

Unless something changes in the next 50 years, 33% of the world population will have “absolute water scarcity;” there will not be enough water, let alone drinkable water, to use in daily life. “That’s a scary number,” said Dr. Ron Faibish in his lecture last Thursday, “In the US, an additional 60 billion cubic meters [of water] will be needed by 2020.” As the need for water increases, more methods are necessary to provide both drinkable water, for everyday use, and water for industrial use. Since water plays a very vital role in energy production, Dr. Faibish came to the Colorado School of Mines to propose a solution.

A large concern for the future is the production of energy and water usage. Part of Faibish’s presentation was on power plants and how they take up huge amounts of water for cooling processes. “This area only increases with the need for hydrogen,” pressed Faibish. The production of hydrogen for power production and oil refining is heavily dependent on water. With a huge increase in energy usage, water usage also will rise an expected 40% in the next 20 years. “China is an upcoming user of energy that we need to be concerned about,”

said Faibish. He believes that all of these issues are heavily pressing for research in nuclear water desalination.

“What is nuclear desalination? It is the production of potable water from sea water in a facility in which a nuclear reactor is used in the desalination process,” said Faibish. Although he admitted the definition was vague, Faibish presented a case for how nuclear desalination could revolutionize the world’s production of usable water. “Why nuclear desalination? There is a lot of waste heat from nuclear power plants... it’s a clean energy... and it’s economically competitive.”

Also, Faibish strongly supported further research for membranes, since much of nuclear desalination depends upon these filters. Faibish argued that filters, especially reverse osmosis (RO), are the most effective way to purify water. “RO is really the operation of choice.” Filters are more energy efficient than other methods, a high technological priority and subject to further improvement.

Faibish argued for an increase in studies for modeling filters. Modeling the nuclear desalination and filtration processes is vital to improving them. Many parts go into a model: computational fluids mechanics, the Lattice-Boltzmann Method, molecular dynamics and

the Navier-Stokes Equations, to name a few. Faibish said that further research and application in both the modeling methods and timing in the computation is crucial to improving desalination technology.

However, money appears to be an issue in the entire process. “These days it’s all about the money and I will never deny it,” admitted Faibish. The average cost of a cubic meter of pure water from the process of nuclear desalination is just a little more than a dollar. Faibish said that money was not an issue in production. “We are converting basically fuel to... water and giving it economic value. From an engineering point of view, we are converting fuel to money”

Dr. Ron Faibish holds a B.S., M.S. and Ph.D. in Chemical Engineering from UCLA. He currently works at the Argonne National Laboratory (ANL) where he has been since 2003. He is a Project Manager at ANL for water production, resource development and nuclear energy applications. Before working at ANL, he was an International Project Manager for the International Atomic Energy Agency for two years. His continued research has produced many improvements in the area of water desalination, membrane separation, and polymers.

University sustainability

Greg Davies
Staff Writer

Dave Newport is a sustainability coordinator who began at the University of Florida and now works at Colorado University (CU) at Boulder. Referring back to the University of Florida, Newport stated, “One of our first steps was to baseline where we were.” The metric for this measurement was, in part, adopted from the corporate base line and in part made up so as to accurately place an educational institution.

After establishing this baseline, the next step was to make sustainability popular. Interest needed to be incited in business people, environmental activists and moderates. It happened. After witnessing this diverse support, the president created a task force of which Newport said, “They made the case.” Eventually, popular support for sustainability began to grow. Action led to the school’s improvment.

CU was, for Newport, not only a different place, but a different environment. There, various semi-autonomous sustainability-oriented groups have a history of operating without vertical structure; they argue and negotiate their way through cooperative efforts. Sustainability projects at CU are funded by the students. The sustainability movement at CU began with the students and staff and eventually became popular with influential people, and subsequently, it has made great gains. “That’s one avenue for bringing forward your plan,”

said Newport.

At CU, the main categories of sustainability work are recycling, transportation, energy/climate, environmental justice and earth education. A notable enterprise within the recycling category is the refurbishing of old computers and donating them. This pays off through mitigating disposal costs, building relationships and it is doing something good. In transportation CU has taken measures to encourage students to bike more often, make use of the public transportation system and generally mitigate carbon emissions in travel. As part of working with conservation/renewable energy, Newport says “Pledging works really well,” that when students pledge to use less power, they actually do use less power. Newport also said “No surprise that two-thirds of our carbon footprint is electricity.” Hence, electricity usage has been a matter of consideration.

Recently CU was rated as more sustainable than University of California at Berkley or Harvard University and present trends show marked increases in sustainability. Newport depicted this trend as existing despite a large, growing campus and despite one unfortunate self perpetuation cycle in which, when global warming occurs, we use more air conditioning which causes more global warming. However, he indicated CU had already attempted

to work ahead and that students will play a role. “I’ve never heard a bad student idea,” said Newport. However, he emphasized the fact that students will need to be targeted earlier on. “Most undergraduates float up when they’re juniors or seniors, work for a year or two, then they’re gone.”

Recently CU was rated as more sustainable than Berkley or Harvard and present trends show marked increases in sustainability

Newport then addressed the greening of government. He predicted that laws mandating stricter pollution controls are all but imminent. He admitted that CU, given the business as usual trend, will have a greater carbon footprint than government mandates would permit. Newport indicated that the disadvantages to being over the limit would include cost, but it could damage the institution’s reputation. “If we don’t do anything... we’ll be seen as laggards” summarized Newport.

According to Newport, the keys to success are realizing that sustainability pays back and gaining diverse support. “It’s about people,” he said. “While you want to be up the food chain, it’s about grassroots.” As a sure step toward sustainability, Newport said, “My answer is, start turning off lights.” Of the Colorado School of Mines he said, “You’re at a C+; you can move.”

Plasma spraying

Amanda Rock
Staff Writer

Engineer a better spray gun? Dr. Elizabeth Dohe says, “Why not?” Her work with plasma and thermal spraying techniques began with her doctoral work here at the Colorado School of Mines (CSM). Dohe returned to campus last Thursday, with a presentation on plasma and thermal spraying during the weekly Metallurgical and Materials Engineering (MME) department seminar.

Thermal and plasma spraying is a coating technique where a material is heated, then sprayed on whatever needs coating. According to Dohe, “Thermal spray procedures use powder, wire or solution as feedstock to produce coatings.” Thermal spraying feedstocks can be metals, alloys, plastics, ceramics, and composites. In the process, the feedstock is combined with energy and a gas, heated and then projected onto a surface, where the particles re-solidify into a hard, protective surface. One or more cathodes heat the gas and the feedstock during the process. “The gas temperatures in plasma spray can be upward of 5000 °C,” said Dohe.

The heat created is the same whether one or three cathodes are used. The difference is the uniform nature of the heating. One cathode can cause uneven heating, which affects the quality of the spray job. The three-cathode method, developed in the 1990’s, is a way to spread the heat out over the whole

feedstock and gas involved in the process. A three-cathode spray gun is a more efficient and more effective method of thermal spraying.

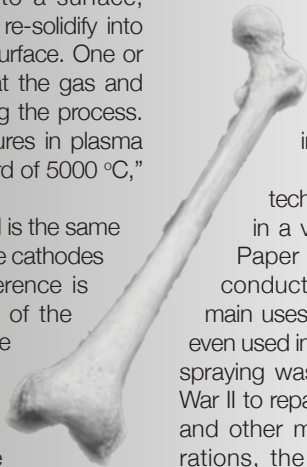
“Thermal spraying touches a lot of industries,” says Dohe. One of the innovative ways plasma spraying is used is in medical implants. The super-heated coating material is sprayed onto the pre-roughened titanium replacement part via a process called High Velocity Oxy Fuel (HVOF).

“The reason thermal spraying is used so commonly,” Dohe stated, “is because you can get nice even coatings bone can grow into in a short amount of time.” The thermal spraying process

The thermal spraying process provides a porous surface on the titanium implant where living bone can latch on

provides a porous surface on the titanium implant where living bone can latch on. But the transplant process can be tricky. Dohe explained, “There are areas you want bones to grow and areas you don’t – movement areas.” The spraying technique has to vary to provide places for bones to attach in some areas and prevent attachments in others.

Thermal spraying techniques are also used in a variety of other fields. Paper mills and the semiconductor industry are two main uses. Thermal spraying is even used in the military. “Thermal spraying was used during World War II to repair aircrafts.” With iron and other materials under strict rations, the military discovered thermal spraying was a cheap and effective way to repair aircraft parts like wings.



STUDENTS

YOUR STUDENT BODY PRESIDENT, KEVIN DUFFY, INVITES YOU TO THE FIFTH ASCSM MEETING OF THE YEAR.

The next ASCSM meeting is November 6 at 7 PM in Student Center Ballrooms A and B.

We want to hear from you! Come speak up at your next student government meeting.

\$25 gift card raffled for the audience at each meeting.

Haunted physics lab

Spencer Nelson
Staff Writer

While many people see Halloween as a celebration of the inexplicable, the Society of Physics Students sees just the opposite. They set out this last Friday to show people of all ages the magic of physics at the First Annual Haunted Physics Lab. Amidst the company of costumed students and families, physics students explained interesting physical phenomena with first-hand demonstrations.

Expectations ran high as a group of approximately 50 people waited for the doors to open. The diverse group was composed of Mines students, elementary school kids, parents, people touring the campus and most anyone who walked by. The hopes for what they were about to see were as varied as the costumes worn. Some hoped for levitation, some hoped for a bed of nails, some hoped for candy. Few were disappointed.

"They've put together something that... the broader population will really get a kick out of," said Dr. Patrick Kohl. "This is really cool." Held in the student center ballrooms, the Haunted Physics Lab was divided up into three sections. First was a maze of tables and chairs where everyone was welcomed into the lab.

The second section housed the main attraction. Upon walking into

the second room, everyone was greeted with a blast of air from a "cannon" composed of a trashcan and a plastic bag. Around the room were various stations that all demonstrated different amazing experiments that can be explained with physics.

The third section was an open room with music, balloons, and a strobe light. Many children enjoyed the effects of the strobe light while dancing to the music around the room.

The experiments were the main attraction. Dan Allen, an Environmental Engineering major, liked "the originality of the ideas." For example, a bell glass housed a rather loud alarm which, to the amazement of onlookers, slowly went silent as a vacuum pumped the air out of the glass. People lined up to stand on the swing hanging from two phone books that had their pages interlaced.

With the help of mirrors, a witch was flying on her broom and a table had heads sitting on top with no body beneath. Lasers were connected to the sound system so that the light bounced around slightly with the beat of the music. Kids stood excitedly on the overturned table that was supported by nothing but party balloons. Smiles were abundant as children, students, and parents discovered the wonders of science.



TIM WEILERT / OREDIGGER

Green amendments?

Akira Rattenbury
Staff Writer

Tomorrow's ballot has 10 initiatives with a range of goals to amend the Colorado Constitution and Colorado Revised Statutes. Amendments 52 and 58 will potentially change severance taxes on Colorado oil and gas production with two different systems of distributing the funding with impacts to the environment and economy.

Amendment 58, formerly known as the Scholarship Fund Initiative, would make a revision to the Colorado Revised Statutes. State lawmakers passed H.B. 1076 in 1977, placing a severance tax on extractive industries. It stipulated an 87.5% property tax credit for certain activities in order to accommodate existing local and county taxes.

Amendment 58 will eliminate the tax credit and establish a flat 5% tax on gross income from extracted oil and gas. The bill also stipulates the revenue generated, estimated to be over \$300 million in additional taxes, will be earmarked for particular goals and will not be added to the Colorado General Fund. The previous 50/50 split of severance tax revenues between the Severance Tax Trust Fund and Local Government Severance Tax Fund will be amended to give each Fund 22% of the new severance tax revenue and 56% to new earmarked goals.

60% of that 56% will be placed in the Colorado Promise Scholarship Fund, which would be offered to students from families making less than \$100,000, adjusted gross income. 15% would go to "local impacts" of oil and gas development, 15% to wildlife habitat conservation and 10% to renewable energy projects.

Opponents, backed by roughly \$10 million from oil and gas companies, say the increase will hurt local economies by making Colorado less attractive for development and argu-

ing the initiative is part of Governor Bill Ritter's goal to push out oil and gas.

Other dissidents, such as the National Taxpayers Union, also cite issues with the vague language and oppose the use of earmarks, which pigeonhole funding using a volatile revenue stream. *The Denver Post*, industry analysts, and past lawmakers oppose the Amendment due to the tax change's use of earmarks and an additional potential impact on local community tax revenues. County governments may see a precipitous drop in tax revenue if this more centralized state tax system is approved.

Additionally, opponents note the potential for "pass through" of the tax onto consumers, reflected in higher gasoline prices at the pump and higher heating costs. However, supporters have refuted the "pass through" argument, citing the global price market and utility regulation as buffers to any increased cost to consumers, especially in Colorado where 2/3 of the gas produced is exported. The small change in industry revenue will not likely affect global pricing for petroleum products.

Proponents, organized under the leadership of Ritter, several university presidents and others under "A Smarter Colorado" have spent roughly \$3 million in support. Proponents argue the tax increase will help redistribute oil and gas profits, help middle-class families with college expenses, and help the environment with specific earmarks benefiting wildlife habitat and renewable energy.

If passed, renewable energy projects would receive an estimated \$13 million while habitat conservation projects will receive roughly \$20 million for 2009. Likely appropriated by the legislature, it is unclear what mechanism for distribution would be used for renewable energy projects, wildlife conservation and the new

local project funding.

A similar bill, Amendment 52, would redistribute the current severance tax revenue to be split roughly 50/50 between current projects and new state transportation projects with an emphasis on the I-70 corridor. Current severance tax revenue is used for major water project funding with additional revenue helping wildlife, regulation and energy assistance for low-income citizens.

The vague wording of Amendment 52 has been the major challenge by opponents who also argue the long-term outcome of the bill would result in a decrease in water project funding critical to Colorado. The vast majority of current severance tax revenue helps pay for large water redistribution programs essential to the Front Range.

The newly appropriated transportation funding from this amendment would likely subvert current budgeted transportation funds by the state legislature, resulting in no net increase in transportation funding. The possibility of subverting this constitutional amendment is just one of the arguments legislators and numerous opposition organizations have cited.

Amendment 52 has also been assailed as a partisan trick to discredit Ritter and confuse voters on Amendment 58. Its blatant political motivations coupled with poor wording and funding diversion from other essential causes make this amendment difficult for many state lawmakers and analysts to justify.

If both measures passed, Amendment 58's readjustments to the tax distribution would likely be subverted by the constitutional superiority of Amendment 52. This would be a big lose-lose situation for the state, as needed water project and environmental protection revenues will drop, and the state courts will be left with a serious problem to sort out.

Macbook performance

CONTINUED FROM PAGE 1

With the big features taken care of, we can turn to performance. In a word, it's snappy. Then again, with a 2.4 GHz processor and 2GB of memory (you can get 4GB if you want), what wouldn't be? Running Windows XP in VMWare is a breeze, and playing HD video works great even on the integrated graphics (which are on battery life). Then again, we're talking about an integrated chip with the performance of a low-end dedicated graphics card, a phenomenon that's becoming more common these days. I actually didn't have a reason to test out the higher-powered graphics on the Macbook Pro, as the Mac platform just doesn't have a large number of graphics-intensive games on it, but from what I've gathered, the performance is a shade better than the chipset found in previous-generation Macbook Pros. A few notes: if you want to switch graphics modes, you have to go into System Preferences, change a setting and then log out of the system to make the change. You'll also get lower battery life on dedicated graphics than integrated, but that's to be expected. Again, the built-in nVidia GeForce 9400M works perfectly fine for HD video. Last, you could theoretically have both GPUs working in tandem for even better performance, but Mac OS X does not support that feature yet.

Before rounding things out with a look at battery life, let's do a quick roundup of the ports on the left side of the system, as well as expansion options. Port-wise, you've got FireWire 800 (an adapter is needed for "regular" FireWire capabilities), mini DisplayPort (adapters are needed, to the tune of \$29, to hook up to any standard display, or \$99 for a 30" display), MagSafe power (the power brick is smaller this time around), gigabit ethernet, microphone, headphone and 2 USB 2.0. You can look at my rant about USB ports and al-too-progressive I/O systems in a previous article (or two) of mine. For expansion, you get an ExpressCard slot (the narrow kind), plus the ability to easily replace your hard disk (it's in the same compartment as the battery) and memory. So, don't buy a solid state disk (SSD) option from Apple; you can install your own for cheaper or even get a faster one. With memory, you may want to go with Apple for now. DDR3 RAM is expensive at \$30+ per GB (as opposed to less than \$20 per GB for DDR2).

Last but not least: battery life. Simply put, it's quite good. With Bluetooth off and use limited to web-surfing and note-taking, you can squeeze out more than five hours on a charge, using the integrated graphics chip. If you want to watch HD video with the sound turned up, the figure is closer to

three hours, again using integrated graphics. This means you'll definitely be able to make it through a DVD and then some without plugging in. On the other hand, don't expect a computer with a built-in Energizer bunny. Also, if you want high-performance graphics while away from an outlet, realize that your battery life is going to take a hit.

In conclusion, the Macbook Pro is a beautiful, fast, well-designed machine with a few quality issues on both its keyboard and touchpad. These issues will probably get worked out, leaving you with a minimalist powerhouse more akin to a portable, ExpressCard-equipped iMac than a mobile Mac Pro. You get Apple-class features with Apple-class simplifications that people like me would call oversimplifications. But if you're used to the Apple way, or want a high-performance system with switch-able graphics and a great design, and money is no object, the Macbook Pro qualifies. However, before you buy, look at the previous generation of Macbook Pros. Their performance specs are actually quite similar, and the prices are 25%, or more, lower. Now that's what you call an "Apple tax". I won't be getting a new Macbook Pro, but if you have the money, there's no big reason not to buy, especially if you want Apple products.

executive
LECTURE SERIES



Steven B. Hinchman '87

Executive VP of Technology
and Services
Marathon Oil Corporation

**Delivering America's Energy
Security**

Thursday, November 6, 12 - 1 p.m.
Metals Hall, Green Center

Box lunches for students served immediately
following the lecture

Please RSVP to Pat Bohner by November 3
patricia.bohner@is.mines.edu or 303.273.3135

Geek of the Week

...Cam Emick, Sophomore: Mechanical Engineering

Benjamin Johnson
Staff Writer

[Oredigger] Do you consider yourself a geek? Why or why not?

[Emick] No, because I am dumb, yes, because I am in band. I watch *Jeopardy* with my geeky roommates pretty much every day and also I watch *Tyra* because we don't have cable.

Do you think others consider you a geek? Why or why not?

My roommates do because I have to go to band twice a week and apparently you think I'm a geek.

Do you have any strange talents?

No, most of my talents are pretty normal. I can solve a Rubik's cube, but that's not really strange around here.

What is the geekiest thing you own?

I have this giant poker chip pillow. My girlfriend is a music major and even more of a band geek than I am, even though I don't really own her.

What is the geekiest thing you have done?

I went to Europe with the band and met my band geek girlfriend on that trip.

Describe how you met.

We were on a boat and we were

playing spoons with colored pencils; then as the trip went on, through all the concerts and band practices, sparks flew and emotions ran high. She actually talked to me.

What is your favorite aspect of Mines?

Calculus 3, because I love to do calculus and algebra and I get a feeling of accomplishment from solving every problem; it's probably the greatest thing since sliced bread.

What made you choose Mines?

I just love math so much, I couldn't think of a better place to go.

What class is your favorite?

I like PA because there is a fair playing field with other nonathletic kids; there aren't any dominating jocks.

What do you plan on doing with your degree?

I plan on working for a major car company designing Corvettes.

Do you have any hobbies?

I am a Resident Evil addict

and I like playing computer games such as Rise of Nations and Flight Simulator.

What clubs or activities are you involved in on campus?

I am in Campus Crusade, CSM Marching Band and CSM Concert Band.

What do you play in the band?

Bass clarinet, probably the coolest instrument in the band because it is big and it's black and it's not the tuba.

How long have you been in band?

I have been in band since the fifth grade.

Do you plan on playing in a band after college?

That is definitely a possibility,

probably some local band that is wherever I work.

If you were stuck on a deserted, barren island and could have three items, what

would they be?

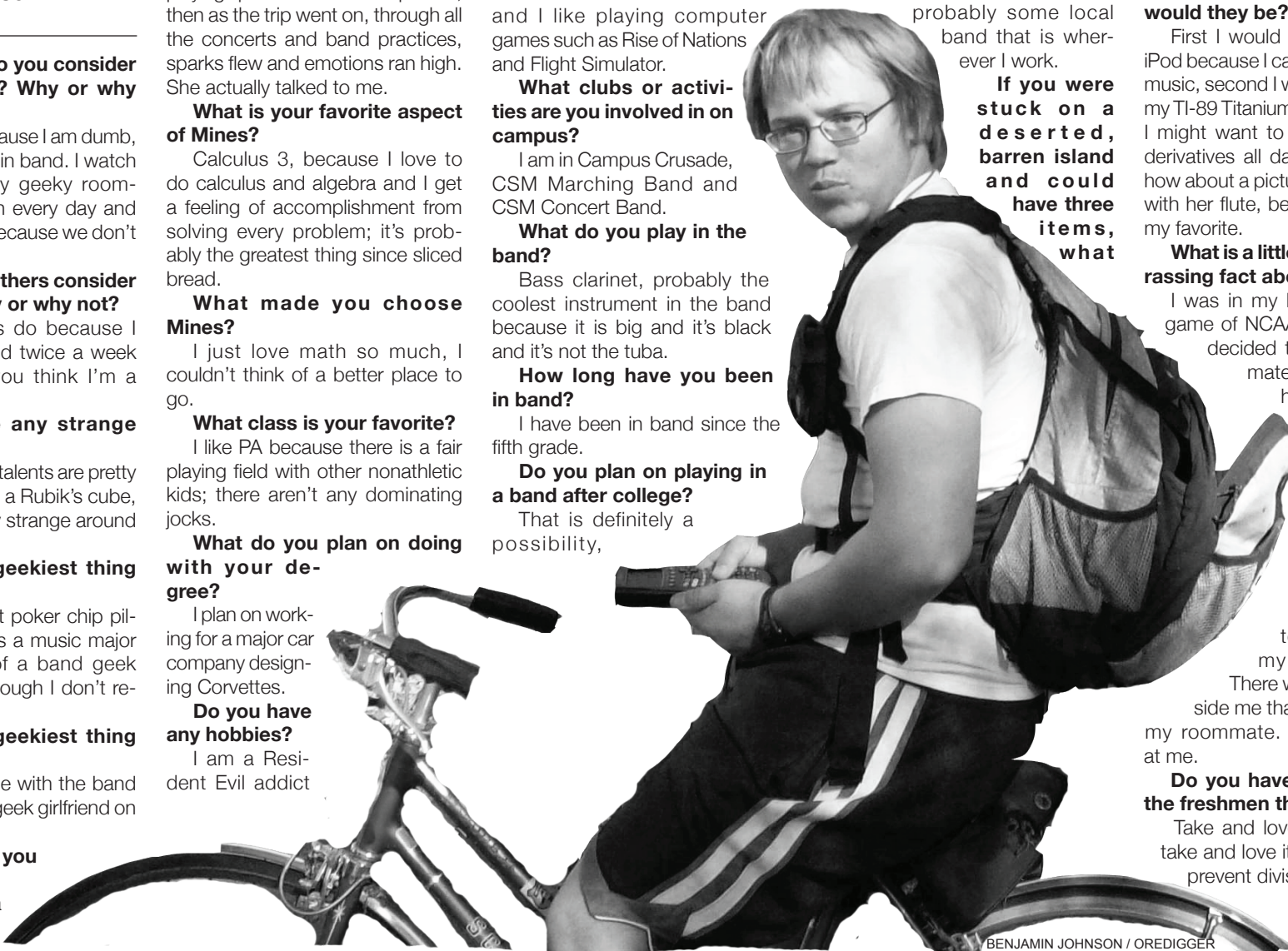
First I would have to have my iPod because I can't live without my music, second I would have to take my TI-89 Titanium calculator in case I might want to do integrals and derivatives all day long, and then how about a picture of my girlfriend with her flute, because that one is my favorite.

What is a little known, embarrassing fact about you?

I was in my house enjoying a game of NCAA Football when I decided to give my roommate a wedgie. Then he got pissed and ran after me and took me down to the ground in a very painful way and he gave me the biggest wedgie I have ever gotten which ripped my boxers in half. There was a fiery rage inside me that led me to moon my roommate. He just laughed at me.

Do you have any advice for the freshmen this year?

Take and love math, all math, take and love it all. Only you can prevent division by zero.



BENJAMIN JOHNSON / OREDIGGER

Ask Mabel

Dear Mabel,
I want to get on birth control.
But I don't want my parents to know. What should I do?
Signed,
Worried in Weaver

Dear Worried,
Getting on birth control is a big decision. In an ideal world, your parents would be supportive and happy that you've taken responsibility to protect yourself against an unplanned pregnancy. In the real world, though, this may not be the case.

There are several options for you, and for your required level of confidentiality. Come see the nurse practitioners, Debbie and Anne, at the SHC for a discussion. But in a nutshell, here's what we'll tell you.

First, we'll talk to you about all the birth control options available to you, from condoms to the Pill to the Shot and including abstinence. We'll review the risks and benefits of each method, and help tailor a method to your needs.

We'll ask you about various health issues that may impact your choice of contraception.

We'll tell you about the importance of the "well woman exam" and figure out where you should get it done. We'll also explain it to you to dispel any myths you may have heard about getting a Pap test.

Depending on your health insurance policy, it may be difficult to keep your parents out of the loop. While we don't charge you for a well woman exam at the SHC, there will be a bill from the lab for the Pap test. As well, you will be confronted with insurance co-pays for your birth

control prescription. If you have the Student Health Insurance Plan (SHIP), there is no cost for the Pap. If you have other insurance, then the Pap bill can be sent to you directly to pay. Costs may vary based on your individual policy. Or, we can charge you \$25 at the time of your exam, which is the contracted cost for the SHIP coverage, and you won't have to worry about a bill at all. (However, if your Pap test comes back abnormal and needs further evaluation for HPV, there will be an additional charge for you.)

If all this is a little scary, you can go to the local Planned Parenthood for your Pap and prescription. They ask you to pay a set amount "up front." The same is true for the Jefferson County Health Department's Family Planning Clinic.

If you decide to go on the Pill, we are fortunate to have access to two common brands at low cost. Target, Wal-mart and King Soopers currently offer Sprintec and TriNessa for nine dollars a month, out of pocket, which means your insurance is not billed. This can be a substantial savings to you, as many co-pays for generic drugs can range between fifteen and twenty five dollars! And, since you are paying for this yourself, there is no way for your parents to know. Unless they find your pill pack in your backpack.

That scenario is why we'll encourage you to let your parents know that you've made an adult choice to prevent an unplanned pregnancy. They may be more understanding and accepting than you think. But in case they are not, we do have options to help you out.

Non-

Geek of the Week

...Conner Coltharp, Sophomore: Electrical Engineering

Neelha Mudigonda
Staff Writer

[Oredigger] Why did you come to Mines?

[Conner] It's a good engineering school and for a change of scenery.

What do you like about it?

The fact that they actually make you work for your grades.

What don't you like about it?

All the stereotypes associated with Mines students.

What type of music do you like?

Mostly classic rock, but all kinds - blues, classical.

Did you play any sports in high school?

I ran track and played soccer.

Do you play any sports at Mines?

I run track at Mines - hurdles, the 400, the triple jump.

What do you like to do in your free time?

What's that?

Seriously.

Hiking, rock climbing and playing guitar.

You play the guitar? Are you any good?

Yeah, I'm kind of a big deal.

What's your favorite band?

Aerosmith.

What do you want to do after leaving college?

Be excellent. Something in the way of Tony Stark.

Where's your favorite place to hang out on campus?

The map room.

Off campus?

The Coors parking lot.

What's the geekiest thing you've seen at Mines?

A kid named B-Jammin'. He played video games until 3 minutes before class and ran to class.

What did you dress up as for Halloween?

Guido.

What's that?

My new haircut. YouTube it.

Describe the average girl at Mines.

Smarter than most girls, but still usually pretty cool.

Would you marry one?

Only if Pamela Anderson got an honorary diploma from Mines.

Favorite pets?

I love all animals. They're delicious.

If you could solve any problem, what would it be?

Stupid people. I would fix them.

What's something very few people know about you?

I'm actually half-black.

What's the riskiest thing you've ever done?

Rock climbing without ropes on North Table. It was fun.

Did you vote?

Yes.

For someone amazing?

Yes.



NEELHA MUDIGONDA / OREDIGGER

Principally Irked

American voters: Asleep at the wheel?

Andrew Aschenbrenner
Opinion Columnist

It is finally here. Election Day 2008. The culmination of almost two years of campaigning, voter registration and political strategy. Did you vote? Are you going to vote? How high was turnout? Did polls show the vote accurately? What about chaos and voter fraud and voter suppression? Does the end justify the means? This has certainly been a historic election, but does it really change anything?

By the time you read this, you may even know who has won the Presidency and the breakdown of the new Congress. My question is, what is different now? Whether we elect our first black President or our oldest first-term President with our first female Vice President, how do we know that the changes are more than cosmetic? Did voters turn out to vote in overwhelming numbers? Is there a mandate from American citizens demanding results?

The United States of America has so far been 232 years of a wonderful experiment in freedom and democracy. By any account, it has not been a perfect ride. The country has seen rocky times, tragedy, success, failure, embarrassment, prosperity and everything in between. We seem to forever be fighting for the right to continue as the New World, the genuine land of

the free and home of the brave.

No matter your political philosophy or personal status, these are troubling times. A game-changer is needed. Despite the frightening picture of a faltering economy and attacks on our civil liberties by our own government, the most concerning part about the quandary we find ourselves in is that it has been largely caused by lack of caring.

We, the citizens of the United States, are the official guardians of our country, and a great number of us have been asleep at the wheel.

We, the citizens of the United States, are the official guardians of our country, and a great number of us have been asleep at the wheel

Frustrated with the workings of our government, we have disconnected from our democracy. Large numbers of the voting public have disengaged from their responsibilities as citizens. A crisis like the current one doesn't just happen. It occurs because of neglect.

If you had to guess, what percentage of eligible voters would you say voted in the last Presidential election? According to the Census Bureau, only about 64% of voting-age citizens voted in 2004. That means the remaining 36% declined their right to vote.

That's perfectly fine, and obviously within their rights. But it shows a remarkable unwillingness to be involved.

I understand the frustration. I can see why people hate politics. What I can't see is a just reason for giving up voting rights. Voting is easy. The Internet makes it relatively simple to stay informed. There are more options than ever to cast a ballot at one's convenience. The argument that one vote 'doesn't count' is ridiculous. Would you give up your voice just because someone ignores you?

A vote validates so much. It says that you care. It shows what you believe in. It involves you in your own country. The only way to truly throw a vote away is not to vote. It's a sad day in a democratic nation when its citizens do not care enough to stand up and take a simple step like voting. Even simple steps can make a big impact on the future.

The past eight years are key evidence as to what happens when people neglect to vote. A quote from Frederick G. Bonfils, the founder of The Denver Post, is printed in every edition of that newspaper: "There is no hope for the satisfied man." If a citizen pays no attention, and takes no responsibility to fight for his rights, then he will lose them. A country with voters asleep at the wheel will surely end up in the ditch.

A green libertarian's political dilemma

Akira Rattenbury
Staff Writer

Politics suck. Fact-abusing attack ads and shamefully dirty campaigns for the last 18 months have driven me nuts. Our imploding economy, schoolwork and three calls a day in the last two weeks from interest groups and campaign centers "urging my vote" for this or that make me want to crawl in a hole and hide tomorrow. If only Coors Lab was still open on Tuesdays.

Tomorrow's decisions on key candidates and issues have the potential to carve up and reshape Colorado and our nation for better or for worse. Your future representation, tax burden, definition of a human, labor laws and more could be affected. Here's a quick rundown of major races and issues and how I think you should vote on them.

Ignoring the big race, the for-gone conclusion of lobbyist Bob Schaffer's futile bid against strong-arm and favorite Mark Udall leaves more to be desired from the Republican Party's candidate pool. I may throw my nod to Green Party gadfly Bob Kinsey or American Constitution candidate Doug "Dayhorse" Campbell for their opposition to the war in Iraq and interesting stances on issues.

Incumbent District 7 House Representative Ed Perlmutter has been successful in his first term

in Washington and will likely win again despite a strong candidacy by Republican John Lerew. Lerew's financial background is great, but his issue stances reflect little personality separation from the Republican platform. Perlmutter's support for renewable energy and progress thus far deserves to be continued.

For the Colorado House District 23, incumbent Gwyn "the fighting Grandma" Green, who has a perfect environmental voting record, will likely win for her success in the capitol building and faithful service to Colorado. I wish the Republican opposition by teacher Mary Lynn Wagner, who has an excellent website arguing her stance on issues, could have run a more visible campaign. Her thoughtful ranting about overpopulation's affect on the environment is good but her endorsement of Arctic drilling misses the caribou.

The battle for the Jeffco commissioner is between deceitful, partially effective, incumbent Republican Kevin McCasky, untested blogger/Democrat Jason Bane and Green Party candidate Scott Zulauf. Despite McCasky's ability to reform the county budget, his scandal ties, dodgy logic and support for beltway expansion north of Golden taint my interest in the strong fiscal conservative. Scott Zulauf's sustainable development ideals, opposition to the beltway and support of

open space win my vote.

For the issues, reading the blue book gives a good cursory start, but thorough research online will help fence-sitters (<http://ballotpedia.org> is a decent site). As a good rule of thumb, if you are unsure about a constitutional amendment (all the major issues), vote no. A no vote protects our constitution which cannot be fixed by our state legislators if a bad law is passed.

Vote no on Amendment 46, 48, 52 and 58.

The personhood amendment, 48, is terrible by itself.

Amendment 46, which would repeal affirmative action gains in the last 40 years with blatantly false claims is too much change, too soon. While ending reverse discrimination is good, established imbalances in our social system prevent minorities from gaining entrance to higher education. Socioeconomic disadvantages still follow racial lines and eliminating race and gender factors will hurt lower class students who do not



Amendment 48: What happened to common sense?

Michael Rose
Staff Writer

The Colorado ballot this year is the largest in the nation, and not only that, but has one of the most controversial amendments. Amendment 48 proposes, "As used in sections 3, 6 and 25 of Article II of the state constitution, the term 'person' or 'persons' shall include any human being from the moment of fertilization." From the moment an egg becomes a zygote, a diploid cell, it's considered a human person, with all rights therein.

Amendment 48 is irresponsible, at best. The definition of a person set down by the amendment is far too broad. It's humanizing a zygote. At this point, many bacteria are more complex. The negative impacts of doing so could, and likely will, have vast reaching consequences. By defining a zygote as a person, that cell has rights. Under Amendment 48, a man could sue a woman for having a miscarriage and have her charged with negligent homicide. In vitro fertilization would likewise be illegal, as multiple eggs are fertilized in order to achieve a successful pregnancy. Abortion will become illegal.

All abortions. Rape, incest, it doesn't matter. They will become illegal in the state of Colorado. Perhaps you drank too much and ended up having unprotected sex. You can't legally take a morning after pill to try to prevent the pregnancy, and you can't have a fetus aborted early on, either. All you can do is hope. I see a more than marginal rise in the rate of teenage pregnancies.

Steve Curtis, a vice-president of American Right to Life has his own views on the reasons for wanting to outlaw abortion with Amendment 48. He was quoted as saying, "Abortion for incest emboldens a criminal to rape his young relative, helps him escape being caught, tempts him to

repeat his crime and is not compassionate because it kills a baby and increases the woman's suffering." Okay, wait. Abortion encourages incest, because it helps him escape capture and tempts him to repeat it? I'm sorry, but it's going to happen, despite abortion. Just look at the case of Josef Fritzl, the Austrian man found to be holding his daughter in his basement for over 20 years. If Steve Curtis is expecting children as a result of incestuous relations to be the way one can identify such crimes, not only is it wrong, but it's cruel and promotes further suffering for both mother and child.

Amendment 48 strips away any right that women have to choose. Furthermore, it makes it difficult to avoid pregnancy. Morning after pills, the pills which can prevent pregnancy for up to 3 days after unprotected sex, will most certainly be contraband under Amendment 48. Any sort of birth control which prevents fertilized cells from successfully implanting in the uterus will be outlawed. Even if Amendment 48 passes, it's possible, nay, probable that it will be struck down by the courts. In 1973, the U.S. Supreme Court defined a person in Roe vs. Wade, the landmark trial

which is the legal precedent that gives women the right to choose. That precedent, set at a national level, will overrule any state law dealing in this matter. I personally cannot see Amendment 48 passing during this election. Those with any form of common sense will see the lack of wisdom in this flight of fancy meant to outlaw abortion. Setting aside my pro-choice opinion for a moment, there are far better ways to regulate or remove abortion than Amendment 48. I voted no, what will you do?



If Amendment 48 passes, the definition of "person" would include a zygote, or an egg that has been fertilized

Political "Real Speak" | Ballot initiatives

Matthew Pusard
Content Manager

For those who missed out on early or absentee voting, its go time on November 4. But those ballots are going to be long. On the Colorado ballot this year, there are 14 different amendments as well as 4 referendums. To get in and out of the voting booth on November 4 as quickly as possible, it's best to make your decisions on these ahead of time. Here is the skinny on what is on the Colorado ballot in 2008:

Amendments 53, 55, 56 and 57: These are the four amendments where your voice does not matter. The votes, which were on labor laws, will not count due to the sponsors of these bills pulling the initiatives off of the ballot in exchange for businesses helping fight Amendment 47. They reached this compromise too late to have the verbiage taken off the ballot, but early enough to have the vote invalidated.

Amendment 46: Amendment 46 prohibits discrimination against any individual or group on the base of race, sex, color, ethnicity or national origin in public employment, education or contracting. The initiative would essentially end affirmative action in the state.² Proponents claim that racial classifications are divisive and this amendment would provide equality for all. Opponents claim that discrimination still exists in society and women and minorities are under-represented in top-paying fields, necessitating the need for programs to correct for past discriminations.

Amendment 47: This is called the Right-to-Work Amendment. The amendment would prohibit requiring union membership or the payment of union dues as a condition of employment with a company. Those who favor the

1 <http://www.thedenver-channel.com/news/17607450/detail.html>
2 <http://cbs4denver.com/seen/amendment.46.colorado.2.850917.html?detectflash=false>

amendment claim that that it will stop employees being forced to pay dues without their consent. They also claim that the measure will make Colorado more economically competitive, like surrounding states who have adopted Right-to-Work status. Opponents of 47 claim that it will skew the balance between businesses and labor unions in favor of the businesses. They also claim that employees could avoid paying their fair share for benefits that all employees, union and non-union, will receive.

Amendment 48: This amendment defines life as starting at the moment of fertilization. Those in favor say the amendment gives all human life, born and unborn, equal rights and would provide grounds to prohibit abortions in Colorado. It would also help provide a more uniform application of the term "person" in law. Those against it say that it violates the privacy of a doctor patient relationship and unduly influences medical decisions. Additionally, they say that the amendment could ban popular forms of birth control such as the birth control pill and emergency contraception.

Amendment 49: Amendment 49 regulates deductions allowed for government employees. Proponents say it reduces potential for conflicts of interest for those employees. Opponents say that it prohibits public employees to make an independent decision about supporting organizations through paycheck deductions.

Amendment 50: This amendment would allow gambling towns to vote on raising maximum bets to \$100, extend casino hours, require statewide approval of tax increases if the limits are raised and funnel any additional gaming tax revenue to community colleges. Arguments for this amendment include that it could increase funding for community colleges without cutting funding elsewhere, and it gives communities a say in what goes on in their town. Arguments against it are that compulsive gambling could increase and that this source of revenue is inconsistent.

Amendment 51: 51 would increase state sales tax by .2% over two years and use the money for services for the developmentally disabled. Proponents claim the increase will help reduce the wait list for these services and reduce the cost to taxpayers in the future. Opponents say that in this economic climate, a tax hike will hurt people who are already struggling.

Amendment 52: Amendment 52 deals with redirecting a severance tax on producers of natural resources to fund congestion-relieving projects on I-70, among other highways. The pros of this initiative are that it improves infrastructure without raising taxes and it protects transportation funding. The cons of it are that necessary water projects will have money diverted from them en lieu of transportation.

Amendment 54: 54 restricts government contractors and their families from making political contributions if they have received a no-bid contract from the government. Elected officials found guilty of violating this law may be removed from office. People in favor of the bill say it will increase transparency and force government to re-evaluate its no-bid policy. People opposed say it interferes with an individual's right to support a campaign monetarily and with relative being included, it would be nearly impossible to monitor.

Amendment 58: This amendment eliminates a property tax credit on the oil and gas industry in favor of using the additional revenue on scholarships, habitat preservation and clean energy production. Arguments for this amendment are that the \$300 million subsidy for the oil and gas industry, larger than any other state, would be eliminated in favor of helping low- to middle-income households receive a college education. Arguments against are that the prices of food and fuel will rise because the tax will be passed on down to the consumer. Also, the amendment would not provide critical funding for the universities and colleges in the state.

Amendment 59: The final amendment on ballots will eliminate

rebates on money collected over what the state is allowed, instead spending it on public education and putting money aside in a savings account for said education. Proponents claim that the amendment will provide a permanent source of funding for public education and provide a well-educated work force in the future. Opponents claim that it will eliminate all future tax rebates and increase the size of government while allowing legislators to decrease education funding in budget bills.

Referendum L: This would lower the age requirement to be a member of the Colorado State Assembly from 25 to 21. The debate is between youth bringing in new perspectives versus the youth lacking the experience to handle political pressures, such as lobbyists.

Referendum M: M would remove an obsolete provision allowing delays in land value increases due to planting hedges, orchards or forests. Proponents say it eliminates obsolete language in the state constitution while opponents want the verbiage left in there in case there ever is a need to encourage reforestation through a tax exemption.

Referendum N: This referendum removes obsolete language concerning the sale of alcohol in Colorado. Those in favor say it will just remove unnecessary language in the state constitution while those opposed say it will diminish the historical character of the constitution and increase the difficulty of future research of the document.

Referendum O: O changes the requirements for statutory and constitutional initiatives on the ballot. The supporters of this referendum say it will encourage a wider distribution of people from all over the state to approve of a proposal before it goes to the ballot. The opposition says that it undermines a person's right to petition and increase the difficulty on grassroots initiatives being approved.

Additional Sources: 2008 State Ballot Information Booklet, League of Women Voters of Colorado Education Fund, ballotpedia.org

Is it over yet? | An unaffiliated voter's reflection on the election

of entitlement to the Democratic nomination, something that left a bitter taste in my mouth.

During the same time, I was leaning toward Mike Huckabee. Of all the candidates who were in the race one year ago, I think that Huckabee had a solid head on his shoulders and his heart in the right place. He reflected leadership qualities that impressed me, and had a down-to-earth feel. Unfortunately, Huckabee did not receive the Republican nomination.

So now, with the elections here, the candidates have been chosen and my views have stayed the same. However, now the names have changed and I am once again drawn toward the person who I believe will bring this country together, instead of furthering the gap.

Since I have not been swayed by partisan politicking and party lines, I have been able to choose who I am voting for based on my own standards and views.

While neither candidate evokes the same feelings I had about Clinton and Huckabee, I definitely have a preference. McCain has a long and sordid history with the Republican Party. He ran for president in 2000 and has been in Congress since 1982. Since then, the political polarizing of America has gotten worse. While he tries to describe himself as a "maverick," I almost feel like McCain is trying to cover up 26 years of traditional right-winging. He is from another generation, one I do not easily identify with: one where politics were defined by parties.

What this country needs is someone who has the leadership and charisma to bring people together, not tear them apart. Even though tensions are running high right now, I feel that Senator Barack Obama is the clear choice; I believe that he has the potential to begin shrinking the political gap. Obama's progressive stance on the

issues reflects a new generation of American voters, a generation fed up with the status-quo and who want to see real change.

I see Obama as I saw Huckabee: a man with the down-to-earth sensibility and natural leadership necessary to effectively lead America. I also see McCain as I once saw Clinton: a candidate who feels that personal experience and age should warrant election. This country does not need a leader from another generation, it needs a fresh approach to politics. It needs change.

Editorials Policy

The Oredigger is a designated public forum. Editors have the authority to make all content decisions without censorship or advance approval and may edit submitted pieces for length so long as the original meaning of the piece is unchanged. Opinions contained within the Opinion Section do not necessarily reflect those of Colorado School of Mines or The Oredigger. The Oredigger does not accept submissions without identification and will consider all requests for anonymity in publication on a case-by-case basis. Submissions less than 300 words will receive preference.

Must See Movies: Leaders to emulate

Benjamin M. Weilert
Staff Writer

With the 2008 presidential election ending this Tuesday, it is time to choose the next leader of our country. Leaders can come in many shapes and sizes, but some of the most notable have shown themselves as leaders of men through the mighty conflict of hand-to-hand combat. This week's Must See Movies exhibit three leaders who have proved themselves on the battleground.

1. *Spartacus* (1960)
Yet another Stanley Kubrick classic that recently made the American Film Institute's top 100 at #81. Kirk Douglas plays Spartacus, a slave during the reign of the Roman Empire. Fed up with being forced to fight fellow slaves as a gladiator, Spartacus leads the slaves in a revolt, thereby gaining their freedom. Word spreads quickly as other slaves are forcefully freed by the newly formed military force. Eventually, the full force of the Roman Empire comes crashing down on the ex-slaves, sending these men back into slavery. Spartacus escapes a tragic death due to the loyalty of his men, who are willing to die in his place because of the freedom he gave them (this is the "I am Spartacus" scene). With his moral integrity and endless courage, Spartacus remains as one of the great leaders of the cinema.

2. *Braveheart* (1995)
Winner of the Best Picture Oscar in 1995, *Braveheart* shows Mel Gibson at his best as he portrays manly-man William Wallace. Returning to Scotland after many

years, William Wallace finds his homeland under the rule of the English because the late king of Scotland passed away without anyone to pass the kingdom on to. Collecting together a rag-tag group of men to act as Scotland's army, Wallace leads these men into battle against the English with impressive results at the Battle of Stirling. Wallace then takes the fight into the English's territory when the Scottish army storms the city of York. A strong leader, with a great pep-talk monologue, William Wallace is perhaps the best known figure from Scottish history due to Gibson's portrayal.

3. *Gladiator* (2000)
Russell Crowe won the Oscar for Best Actor in 2000 for his role as Maximus in *Gladiator* (which also won the Best Picture Oscar that year). Leader of Roman military forces, Maximus is picked by Marcus Aurelius to become the next emperor of Rome. This angers Commodus (son of Marcus Aurelius) who feels as though he deserves the position due to the fact that he is the heir to the current emperor. To get his way, Commodus kills his father and orders the death of Maximus. However, Maximus escapes and lives undercover as a slave who rises through the ranks to become a gladiator, eventually competing at the Coliseum in Rome. Maximus shows us that natural born leaders are often acknowledged by those above them, and will sometimes bide their time in order to achieve their goals.

For Homework – See 300 (2007)

3OH!3 sold out at the Gothic

Tim Weilert
Content Manager

What happens when you take several hundred young people, cram them all into a venue, and add some of the best hip-hop and dance music Colorado has to offer? Answer: You get the epic concert that was 3OH!3 at the Gothic Theater last Saturday.

As part of a two-night stay at the Gothic, Boulder based rap-duo 3OH!3 brought their unique brand of electro-pop-dance infused hip hop to Denver. Tickets for the first night, Halloween, sold out quickly, and I was fortunate enough to secure tickets to the second night's show. A quick word to the wise: 3OH!3 has sold out every Colorado venue for the last several months. If you want to see them, get tickets as soon as they go on sale.

The night began with the old-school hip-hop styling of The Pirate Signal, a Denver based MC and DJ team. After spinning some of the hottest new vinyl, including M.I.A.'s "Paper Planes," the duo warmed up the growing crowd with a few songs.

Up next was another Denver

dance-scene musician, The Chain Gang of 1974. The crowd really got moving as heavy beats and catchy lyrics filled the warm, sticky air. Chain Gang's best song was by far "We At The Disco," although their entire set was strong, helping to build the anticipation toward the main act of the night.

However, there was still one more band before 3OH!3 took the stage: Innerpartysystem. The Philadelphia based

As
3OH!3 took the stage, everyone in the packed venue flashed the group's hand sign. From there it was a non-stop dance-o-thon

band had one of the most intense light shows I have ever seen. In addition to using fog machines, they used computerized spotlights, lasers, strobes and lightboxes to supplement their brand of dance music. It was entertaining to watch, but unfortunately Innerpartysystem's set was not as energetic as what Chain Gang of 1974 had brought.

Just when I thought things were starting to wind down, the main event happened. As 3OH!3 took the stage, everyone in the packed venue flashed the group's hand sign. From there, it was a non-stop dance-o-thon. The crowd danced and sang along to some of the group's hits, such as "Punkb*tch," "Chokechain" and "I'm Not Your Boyfriend Baby." Sean Foreman and Nathaniel Motte performed numerous dance stunts while singing.

As their set came to a close, everyone at the Gothic knew the night wasn't over. 3OH!3 came back and played four more songs for an encore, including radio hits "Holler Till You Pass Out" and "Don't Trust Me."

As someone who usually does not go for hip-hop and dance music, I had initially been skeptical of Colorado's newest musical phenomenon. However, after seeing their intense live show, I must say that it was one of the most enjoyable concerts I have ever attended. Try to catch the duo next time they play a show here in Colorado, and good luck getting tickets.



TIM WEILERT / OREDIGGER

Top seven zombie movies

Greg Davies
Staff Writer

Despite their lack of personality and inability to move at anything faster than a slow shuffle, zombies have maintained their position as one of cinema's most prevalent monsters. This list aims to have mostly zombie movies that have escaped public attention, which is why terrific movies like *Shaun of the Dead* do not appear.

***Return of the Living Dead*:** This movie successfully injected large doses of humor into a genre which had previously been excessively bleak and serious while still featuring a desperate situation. The zombies in *Return of the Living Dead* are possibly the most dangerous in any movie, being fast, impossible to kill and smart enough to create ambushes and call for additional paramedics after eating one group of them. The threat of the zombies keeps the viewer sympathetic with the plight of the survivors even while laughing at their ineptitude.

***Re-Animator*:** Succeeding largely due to the central performance by Jeffrey Combs, *Re-Animator* is probably the greatest adaptation of an H.P. Lovecraft story ever made. Herbert West

plays a graduate student at Miskatonic University whose experiments in reviving the dead become increasingly difficult to cover up, especially when one of his professors turns into a decapitated telepathic zombie who leads an army of the undead in a rampage across the

For
people who like movies
that are so bad that they're good
again, *Plan Nine from Outer Space*
is one of the most entertaining
movies ever made.

university. Jeffrey Combs maintains an impressive deadpan throughout the chaos as Herbert West dispassionately observes the effects of his scientific experiment while fighting for his life and academic reputation.

***Dead Alive*:** This zombie comedy from New Zealand is one of the first directorial efforts by Peter Jackson. The directing style which would produce the epic (and epically slow-paced) *Lord of the Rings* movies is largely unapparent here, as *Dead Alive* maintains a chaotic pace throughout its running length. The movie revolves around a timid mama's boy named Lionel, who

finds his domineering mother even harder to deal with when she turns into a flesh-eating zombie. The situation quickly gets out of hand as Lionel attempts to cover up an increasing number of zombies. Highlights of the film include a fight between a group of zombies fighting a martial-artist priest and Lionel's inventive use of a lawnmower to fend off a horde of zombies in what might be the goriest movie scene ever made.

***Plan Nine from Outer Space*:** Made by Ed Wood, who is largely considered the "Worst director of all time," this movie has the distinction of being one of the funniest, most ineptly made horror movies ever. Aliens bring the dead to life in order to prevent humans from inventing a device which can cause particles of light (which apparently can't be seen or measured) to explode. Dracula star Bela Lugosi died at the beginning of the movie's making, causing his place to be filled by an actor with a cape over his face who looks nothing like Lugosi. For people who like movies that are so bad that they're good again, *Plan Nine from Outer Space* is one of the most entertaining movies ever made.

***Cemetery Man*:** This bizarre Italian zombie movie is about a cemetery caretaker whose corpses have a habit of coming back to life. The caretaker's life is made more complicated when his dead lover begins returning to him in different identities and he begins to "Get ahead on his work" by killing the living in addition to the dead. Alternating between gore, surreal comedy and genuinely touching moments. *Cemetery Man* is a largely unheralded classic which deserves to be seen by anyone with an interest in zombie movies.

***Evil Dead 2*:** Although technically more demonic possession than zombie movie, *Evil Dead 2* still deserves a place on any top horror movie list. *Evil Dead 2* is

Dawn
of the Dead is the model
after which nearly every subsequent
zombie movie has been based.

a sequel to the considerably less humorous *Evil Dead*, in which the protagonist Ash continues to find himself fighting for his life in a haunted cabin full of undead monsters. Bruce Campbell contributes a manic central performance in

what essentially amounts to an exceptionally gory one-man Three Stooges routine. Although not as well known or as high in production as its sequel, *Army of Darkness*, *Evil Dead 2* features a winning combination of splatstick humor and inventive action which keeps the movie interesting despite its lack of plot. The highlight of the movie is the extended sequence in which Ash's hand becomes possessed and attacks him, leading him to cut it off with a chainsaw and later attach the chainsaw to the stump on his wrist.

***Dawn of the Dead*:** After he invented the modern zombie movie with *Night of the Living Dead*, George Romero perfected it by re-using the premise of survivors barricading themselves against hordes of the undead and infusing satire in an interesting setting. The plot revolves around two soldiers and two reporters who take refuge from the zombie apocalypse in an abandoned shopping mall. The mall quickly becomes infested by zombies, who quickly become symbols of mindless consumerism in their single-minded pursuit of human flesh. *Dawn of the Dead* is the model after which nearly every subsequent zombie movie has been based.

Music Reviews

Southern Hospitality. Disciple

Stephen Bartels
Staff Writer

In 1992, the band Disciple was formed. It was the time of grunge, cassette tapes and gasoline that only cost one dollar per gallon. Disciple set their southern-rock standards with their 1995 debut album, *What was I Thinking*. Sixteen years later, they released their eighth album, *Southern Hospitality*, on INO Records.

They have kept their old southern-rock sound with lots of energy and a bit of fresh material. Their last album, *Scars Remain*, had a more metal sound than any of their other albums, while *Southern Hospitality* mixes southern-rock and metal with lots of energy, powerful riffs and blazing guitar solos. The fast songs on *Southern Hospitality* are complemented with a few slower, calmer songs. The last album had "Game On" to be played as stadium music, this album has "321."

An album may have powerful sound, but that usually is not the only selling point.

Southern Hospitality has great material within its lyrics. In the song "Liar," vocalist Kevin Young sings, "I'm not saying you're a liar / It's just that none of us believe a word you say / They say the tongue is like a fire / Nothing but empty promises around your flame." Young addresses many of his life's experiences in all his songs, specifically on

"Whatever Reason" and "Lay Down My Burdens."

Young has been through many trials, and he shows how he trusted on God to get through life's troubles.

Disciple is a group of real people with real, down to earth experiences. The album ends with the song "Savior," which points to their God instead of ending with a bang to lift themselves up- because that's who they are.



CERICIA MARTINEZ / OREDIGGER

There is just one thing that can be found as a fault- the length of the whole album: It is a little short. The twelve tracks average three-and-a-half to four minutes. This brings the album to a total of 46 minutes, which is a little short for a band of this caliber, especially when the average length of most full-length albums is 56 minutes.

Long time Disciple fans may look at *Scars Remain* and think of catchy songs, lyrically and musically, and one thought comes to the forefront: "Can they really live up to the last CD?" Though it was only recently released, *Southern Hospitality* will, by all means, up the ante

for this band.

Must listen to:

Besides the obvious songs ("Southern Hospitality" and "321"), the song would definitely be "Whisper So Loud." This song is one that you'll be singing to yourself for hours and tapping your toe to the beat the whole time.

Fleet Foxes

Jake Rezac
Staff Writer

The Fleet Foxes are a difficult band to define. They combine the melodic and vocal tendencies of a group like Animal Collective, while using brilliant melodies reminiscent of The Shins or Simon and Garfunkel. The group describes its musical style as "baroque harmonic pop jams," however, this (likely on purpose) obfuscates their style even more. Regardless of the Seattle quintet's style of music, it is clear that on their self-titled release the group creates memorable, sometimes haunting songs, which do not need a succinct genre to be enjoyable.

The first thing a listener might notice is the vocal prominence and the slight instrumentation employed by Fleet Foxes. On the first track, "Sun it Rises," there is almost nothing but shared harmonies and reverberated vocals, with occasional use of guitar solos. This sort of penchant to stress vocally-created harmonies continues throughout the album. "Heard Them Stirring," the seventh track on the album, does not have lyrics, but almost the entire song is comprised of vocals with a backing drum beat. It is an aesthetically appealing, near-instrumental piece, and one of the



CERICIA MARTINEZ / OREDIGGER

most relaxed and tranquil pieces of music produced recently.

Although the songs written are all intriguing, there is not a significant amount of variance between the tracks. Certainly, the melodies are each different and appealing, but the structure of the songs is almost entirely constant. While this is not a problem for many, due to the low-key nature of the album, it may annoy some listeners.

The album, at times, transports the listener to another place, a beautiful place, with fairy-tale-like properties. They sing of rising suns and ragged woods, and the reverberated vocals remind one of a 1940s country singer. Overall, the album, while transformative and relaxing, could use some expansion. The fluidity of each track to each other track is near perfect, and how each track relates to the album as a whole is wonderful. However, the reason each track relates so well to each other track is that they are extremely - almost too - similar. This, along with the poetically incomprehensible lyrics makes the album far from perfect, but it's still an extremely enjoyable listen, and one which could easily transcend the era in which it was created, to become a well-known classic.

Beer Review

Golden City Red Ale

Akira Rattenbury
Staff Writer

Not frothy, sometimes stale, always delicious...even when stale. Golden City Brewery's (GCB) ever-present Red can be found in and around Golden, typically tag-teamed with another local favorite, Mad Molly Brown Ale. While not the most select or tastiest brew from the "2nd largest brewery in Golden," the Red delivers when the blight of Coors Lab has thoroughly dulled your senses.

All GCB brews are best enjoyed by the pitcher with friends, over a tray of pretzels in the GCB backyard "beer garden." The Red Ale pours a small head, which evaporates quickly with little lacing. Red to amber hue strikes the eye and a tingle of yeast, malt and grains hit the nose off a strong sniff. The smooth texture invites ample sipping; while the malty roasted finish reminds you

this is not a Coors product.

Sweet taste and mild hops make this a highly drinkable beer, but it can also be underwhelming, especially if you find yourself in front of a poorly carbonated glass. 'Man-up' and try GCB's tasty, hop-tacular Evolution IPA when you've warmed up a bit. The potentially-seasoned bitterness will cheer you up if the Red got you down.

Stars: 3/5



LILY GIDDINGS / OREDIGGER

Fear Before's Halloween Homecoming

Tim Weilert
Content Manager

In recent years, the music scene in Denver has grown and transformed.

As the Mile High City continues to play host to world-famous musicians, the homegrown music scene continues to burst at the seams. Specifically, the hardcore scene in Denver has seen quite a bit of excitement in the last few years. In summer 2007, when longtime Denver hardcore group Vaux decided to call it quits, things were looking fairly grim. However, as I witnessed Friday night, the Denver hardcore scene is alive and kicking (and punching).

Fear Before, formerly known as Fear Before the March of Flames, was in town, playing at the Marquis Theater in LoDo. This show was significant in that it celebrated the release of the group's new self-titled album.

The atmosphere at the Marquis that night was rather jovial and mischievous. Zombies, pirates and ghouls came out in addition to the hardcore scenesters. The emcee for the night was Maris the Great, a guy who dresses up like a zombie

king and makes appearances at Denver area punk shows. The first couple of bands, In Separate Cities and Set Fire To Athens, got the crowd moving and kept things at a reasonable pace.

The Denver hardcore scene is alive and kicking (and punching)

Up next was the band High Five. This hardcore group played their set while dressed up like cops (similar to what you'd see on Reno 911 or Super Troopers).

Although I did not find their music very enthralling, I was entertained by the large group of hardcore dancers that took over the main floor of the venue. "Tear this place apart!" yelled High Five's lead singer as they started their set. Flying fists, scissor kicks, flailing arms and various kinds of flips came from the crowd as heavy beats filled the venue.

After High Five came a slight change of genre. The pop-punk band Animo played through their set, which was a nice changeup. Their lyrics were actually discernable and their melodies were

catchy. At one point they even threw in a Misfits cover, and later did a sing-a-long.

Finally, it was time for the main act. Fear Before, for as long as I have been following them, has been on a constant journey with their sound. This show celebrated their new material, while paying homage to their older songs. With guitars blaring, lights flashing, and costumes in place, Fear Before played through an hour-long set. The best way to describe the set is to say that

Flying fists, scissor kicks, flailing arms and various kinds of flips came from the crowd as heavy beats filled the venue.

it began as a slow burner. The crowd, tired and battered from four previous bands, almost seemed ready to go home.

However, as Fear Before continued through the night, the energy and intensity in the venue rose, and then peaked toward the end of the set. They played through some of my personal favorite Fear Before songs, such as "Mouth," "High As A Horse" and a new number, "Fear Before Doesn't Listen To People Who Don't Like Them." In all, the concert was an exciting homecoming for one of Denver's most innovative hardcore bands.

Season's final home hurrah CSM Cycling Club cruises in at second in the nation

Keegan Hammond
Staff Writer

We closed the home game season against University of Nebraska - Kearney, and the Orediggers went out with an explosive bang. Starting sharply at 12 noon, Mines' Colin Baker kicked off to the eager Nebraska Lopers. Unfortunately, the first quarter was plagued with penalties for the 'Diggers and it ended with Nebraska leading 7-0. Corey Huck continued the momentum in the first quarter for Mines with a 19 yard kickoff return that ended 4:40 later with a Mines punt. With 3:45 left in the first quarter, Kyle Goracke



picked off a pass that ended with J.T. Baum scampering into the end zone, and after Baker's successful extra point, the game was tied after 15 minutes of play.

8:54 ticked by on the clock at the start of the second quarter without any scoring. However, with 6:06 left, Adam Saur ended up in the end zone to make the score Mines 13, Nebraska 7. With only 59 seconds left in the quarter, Nebraska Scored to make it Mines 13, Nebraska 14 at the end of the first half.

The half time show was entertaining once again with performances from the Dance Team and the Band, as well as the Book Store's field goal challenge (where students attempt a field goal for a book store gift certificate).

Quarter three was thrilling. With less than three minutes burned off the clock, David Pesek darted into the end zone on a quarterback keep. About five minutes later, Ben Tiller picked off a bullet pass from Nebraska and ran it back for a touchdown with Baker booting in the extra point. To throw some salt in Nebraska's wounds, the third continued with Marc Schiechl breaking through the Nebraska Lopers offensive line to sack the Nebraska quarter back. Finally, Nebraska caught their breath and with 2:10 left, Nebraska scored a touchdown but failed to add the extra point.

Repeating the pounding of the third quarter, Baker made a 24 yard field goal, while Schiechl hitting hard with yet another sack. Baum lit up the scoreboard with another touchdown to which Baker, who was unstoppable in his kicking, added the extra point. Drew Ferren pitched in with an interception and this type of playing

proves that our team is one of the best when amazing plays like these become mundane. The final score was Colorado School of Mines 37, University of Nebraska - Kearney 20.

After the game, head coach Bob Stitt said that, "although the playoffs are a long shot right now, we should make it into the Dixie Rotary Bowl. This is where the best teams that didn't make playoffs go." Although the season did not go exactly as planned, Stitt commented that "We are probably the best 7-3 (record) team in America, and this game proves it. We definitely wanted to finish strong for our seniors and we

did. I'm proud of the boys." With Mines only losing three starters this year, next year's team is certainly looking very promising.

Since it's the last home game, let us take a look back over the highlights of this year of Oredigger football.

Offensive leaders for the year:
Rushing yards: Corey Huck 364

Passing completions: David Pesek 2,268

Receiving: Adam Saur 51 receptions for 727 yards and 10 touchdowns

Kickoff Returns: Keegan Moyer with 14

Longest kickoff return: Corey Huck with 100 yards

Punt Returns: Tom Kastens with 16 for 171 yards

Defensive leaders:
Total tackles: Hunter Wardlaw with 69

Tackles for a loss of yards for other team: Marc Schiechl with 15.5

Sacks: Marc Schiechl with 9 Interceptions: Drew Ferren 3 Rocky Mountain Athletic Conference players of the week:

Defense: Nick Haniszewski (Sept. 6th)

Offense: Adam Saur (Sept. 13th)

Offense: David Pesek (Sept. 20th)

Special teams: Corey Huck (Oct. 4th)

Offense: David Pesek (Oct.

11th)
Rocky Mountain Athletic Conference National Football Foundation & College Hall of Fame - Colorado Chapter

Adam Saur (Sept. 13th)
David Pesek (Oct. 11th)
Team records broken:

Shutout an opponent: vs. Adams State College (23-0), 10/18/08

Scored 40+ points: at Western State College (41-13), 10/11/08

Did not commit a turnover: vs. Mesa State (L, 24-27), 10/04/08

Forced 5+ turnovers: vs. Adams State College (W, 23-0; 5 TO), 10/18/08

Individual:
3+ rushing touchdowns: David Pesek (3) at Western State College, 10/11/08

4+ passing touchdowns: David Pesek (4) vs. Western N.M. University, 09/13/08

30+ completions: David Pesek (31) vs. Colorado State University - Pueblo, 09/27/08

300+ yards passing: David Pesek (375) at Western State College, 10/11/08

100+ yards receiving: Tom Kastens (104) vs. Adams State College, 10/18/08

10+ receptions: Adam Saur (11) vs. Western N.M. University, 09/13/08

3+ receiving touchdowns: Adam Saur (3) vs. Western N.M. University, 09/13/08

40+ yard field goal: Brian Harclerode (41) at Fort Lewis College, 09/20/08

Blocked a punt: A.J. Montalvo at Western State College, 10/11/08

Returned a blocked punt for a touchdown: James Tucker (35 yds) at Western State College, 10/11/08

Returned a punt for a touchdown: Tom Kastens (53 yds) vs. Fort Hays State University, 09/06/08

Returned a kickoff for a touchdown: Corey Huck (100 yards) vs. Mesa State College, 10/04/08

Interception return for a touchdown: Jeff Hutsell (57 yds) vs. Fort Hays State University, 09/06/08

All pre-game stats courtesy of <http://athletics.mines.edu>.

Elise Goggin
Staff Writer

What do you get when you put dedicated Colorado School of Mines (CSM) athletes and a handful of bikes in Banner Elk, North Carolina? No, this isn't another corny Mines joke. The answer? Second place at the National Collegiate Cycling Association Mountain Bike National championships D2 Team omnium. For the second year in a row, the CSM Cycling Team has finished as a top contender in the nation and they only fell short by ten points to a strong Appalachian State team. This year, the team had six different athletes finish in the top ten in one or more events. For the men, Deider Barrick dominated the field, taking first place in the dual slalom as well as eighth place in the downhill event. He was accompanied by Joe Schneider and Brandon Turman, who also placed in the top ten in their own events. On the women's side, Melissa Marts made a strong showing



COURTESY SARAH ROBERTS

riders. We have/do neither. That's what I love about our team. We are just a group of kids in college who happen to be decent at cycling." After all, Barrick, the Dual Slalom National Champion, only became involved with the team because Brandon Turman saw pictures of him riding his bike on Facebook.

Brandon and Topher Hurley, the president of the team this year, are considered to

"I am be the core of the

extremely proud of the

accomplishments of the Cycling Club!

Cycling's dominant performance the past

two years is not an accident."

team. Barrick stated that "with-out either of these two, Mine's Cycling would be nowhere near as organized or successful as it has been."

Along with great student leadership, another component that makes the cycling team unique is their ability to combine a laid back attitude with a competitive edge. Laid back doesn't mean that they don't work hard, because they do. The daily interval training, sprint workouts and weight lifting are evidence of that, but the difference is that "having fun and progressing as a rider," as Barrick stated, are much more important than the medals around their necks.

Leadership, team camaraderie, hard work and pure talent have made the CSM Cycling Club one of the most successful teams at Mines. John Howard, the Director of Intramural and Club Sports here at Mines, extends his congratulations in the following statement:

"I am extremely proud of the accomplishments of the Cycling Club! Cycling's dominant performance the past two years is not an accident. They are a perfect example of what a dedicated club, great student leaders: Topher Hurley & Brandon Turman, passionate coach Gus Greivel and a supportive club sports program can accomplish. Cycling continues to represent themselves, Club Sports and Colorado School of Mines in a positive manner. The way they have conducted themselves on and off the field provides a blueprint for success for other clubs to follow."



One of Downtown Golden's anchor stores, offering ...

- * Convenient Shopping
- * Great Prices
- * A Huge Selection
- * Innovativeness

- * Homegrown Customer Service
- * A Fundamental Love for the Golden Community!

"Downtown Golden - Where the West Shops"

13th & Washington
Golden
(303) 279-3373
Credit Cards Accepted



is our specialty!

Proud to support CSM!

ALL PHOTOS KEEGAN HAMMOND / OREDIGGER

Fool's Gold

Election update: Obama WINS!!



Annual leaf migration field trip a success

Janeen Neri
Deciduous Interpreter

The freshman Earth and Environmental Systems labs got a treat last week – watching the annual migration of fallen leaves. “It’s more fun every time I see it,” said lab TA Oliver Holmes, “The out-of-state students... their reaction is just priceless.”

The migration begins between late September and early November when the leaves fully mature, turning from green to their fiery adult shades. The adult leaves then detach themselves from their communal nest – called a “tree” – and leap to the ground. This event catches many non-Coloradans by surprise. “Well, yeah, we have a tree in my home state,” said freshman William Yeats, of California, “but the leaves don’t turn all, like, ‘psychedelic rainbows!’ and come off. I guess they’re, like, in arrested development or something.”

“The first time I heard about [the leaf migration] I was all confused,” said Ben Jansen, who is from Arizona, “I mean, first of all, what’s a ‘leaf’? Then I realized it’s the Colorado way of saying ‘spine,’ only leaves are

generally flatter and less sharp. And the spines back home just sort of sit there in autumn.”

After watching the adult leaves leave the tree, the Earth labs took some time to observe the dance of the leaves. “Maybe it’s a mating dance; maybe it’s some sort of ritual play,” Holmes told the class, “Maybe

“We know they have to lay eggs sometime before they die, but we can’t tell when.”

it’s something completely different. We don’t know why they do this, or –aside from some sort of wind involvement – even how they do it, but it’s still really, really cool.”

Another mystery surrounding the leaf life cycle is how new leaves are spawned in the spring. “Scientists are very sketchy on the details,” Holmes said, “We know they have to lay eggs sometime before they die, but we can’t tell when. All we know is that when spring comes, pop! Little green baby leaves are crawling out of trees everywhere!”

Though much about leaves remains uncertain, one thing was clear: the students enjoyed every minute of the leaf migration field trip. “Personally, my favorite part was stomping into their corpses,” said Yeats, “You wouldn’t believe the *totally* awesome crackling noise that makes.”

Local man holds STD conference call

Mike Stone
Clean and Disease-Free Gentleman Standing at the Back

300 women stare glassy-eyed at one man alone behind a podium. He has done them wrong, but they do not yet know why. Jim has something very important to tell them.

Local Golden Resident Jim Turdlesnapper is 26, single, and a “playah.” He has had his “playah” status annually certified by local pimp master, Davey Hipstah, since 2004, due to his smooth language, rock-hard abs, dynamite areolas, ivory teeth and greek-god cheekbone structure. They have made him a staple in the Golden and Denver night life for many years and as a result, ladies literally flock to him like the salmon of Capistrano.

Though he has received these gifts from God himself, Turdlesnapper’s ways have come back to haunt him. God refused comment. After a recent check-up and STD blood test, Jim has come back positive for over 11 different kinds of Sexually Transmitted

Diseases. When and where he got them were up to debate. Jim had the duty of calling all his ex-lovers and explaining that they needed to get checked out themselves.

Though it may seem like a mild task for most, Jim is a “playah.” This means he brings home roughly three to five different women a week; sometimes on the same night. Calling ALL his ex’s would take weeks, so Jim came up with a plan and using his blackberry, sent a text out inviting everyone to the Golden Recreation Center last Friday.

All the women showed up, unaware of what they would be in for. They were told it was a fundraiser at a local bar. After being told to find their seats, Jim entered onto the stage and stood behind the podium as the microphone squealed.

Opening his mouth slowly, Jim let out the fateful words no “playah” should ever have to say, “Ladies, I’ve done you wrong. All of you were once my guests either in my king-sized bed, my fur-covered living room couch or my roof-top hot tub, while listening to the smooth stylings of Marvin Gaye. At some point

in my Booty-Timeline, one of you hit me up with some nasty stuff and you all have to get checked out! Thank you and good night.”

Running off the stage, a flock of women chased him as others simply sat in disbelief thinking, “This Rec Center isn’t a bar at all!” The women slowly dispersed after plenty of comments about how “big” of a man he really is not. They immediately promised to form a Facebook group over the night’s events. As only seven women waited outside for Jim to finally come to his car, four wanted to own him, two wanted to stone him and one said she just wants to be Jim’s friend.

In the following days, all the women proceeded to their local clinic. The clinic was nice enough to give them a group-rate and they sped the process along.

As it turns out, not a single girl came back positive for any STD that there is a test for. After further investigation, Jim had just had some bad sushi the day before his test.

Playah’s unite! And always wear a condom...

Bigfoot in physics department!!! Man in gorilla suit testifies to sighting

Abdullah Ahmed
Reebok Team Member

Some strange sounds originally thought to be a faulty air conditioning system were falsely reported by Mines Public Safety last Friday. There was a light growling heard by two students when they walked through the basement of the Physics Department around 5PM.

The students reportedly turned

toward the noise and saw a strange figure believed to be Bigfoot. “It was *big*, and it had huge feet. We were going to call it Bigfeet, but decided that it just doesn’t sound right, so we landed on Bigfoot,” said John Tinny, a Physics Major, undergraduate student. “When it looked at us, we ran. I think I saw a Physics book in its hand.”

Police arrived shortly thereafter

and quarantined the building. After several hours of a fruitless search, they ended the investigation calling it a, “wild foot chase.”

Two days later, it was announced that Bigfoot was actually caught that night but for the safety of the crowd, they were misinformed. Bigfoot is still under intense probing and questioning about his use of the Physics book.



(303) 278-9999
600 12th Street Suite 120, Golden (12th & Jackson)

We Deliver! \$10 minimum order
Limited delivery area

10% Discount with Student ID

Everyday lunch special:
2 Slices of Cheese pizza & soda
\$5.00 (includes tax)

Come Join us for
HAPPY HOUR

3 to 7 pm
Mon-Fri



—sudoku—

1		4	8	2	3			
5					4			
		6				3		
			4			6	2	
	2			5			3	
	4	9			7			
		8				2		
			3					7
			7	9	8	1		3

Puzzle by websudoku.com

solution

4	8	7	1	6	2	9	3	5
1	9	3	5	4	8	6	2	7
2	6	5	9	3	7	1	8	4
6	3	2	4	8	9	5	7	1
8	5	1	6	7	3	2	4	9
7	4	9	2	1	5	3	6	8
3	1	6	7	5	4	8	9	2
5	2	4	8	9	6	7	1	3
9	7	8	3	2	1	4	5	6

Puzzle by websudoku.com

The Colorado School of Mines Alumni Association presents the 2nd Annual

Lessons in Leadership: Advice You Can Use

An alumni panel discussion featuring seasoned executives

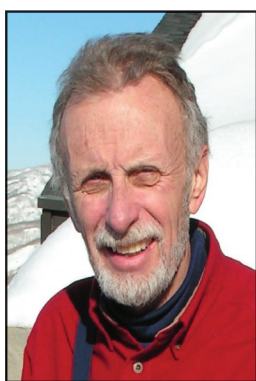
Wednesday, November 12, 2008
 6:00 - Private Reception for "M"-ulators, Panelists and Alumni
 6:30 p.m. (sharp) - Panel Discussion
 Green Center
 RSVP today (seating limited) and submit your questions in advance
 to Alison.Smith@is.mines.edu or 303-273-3295



Timothy Haddon
BSc Min Eng '70
 President and Chief Executive Officer
 International Natural Resource
 Management



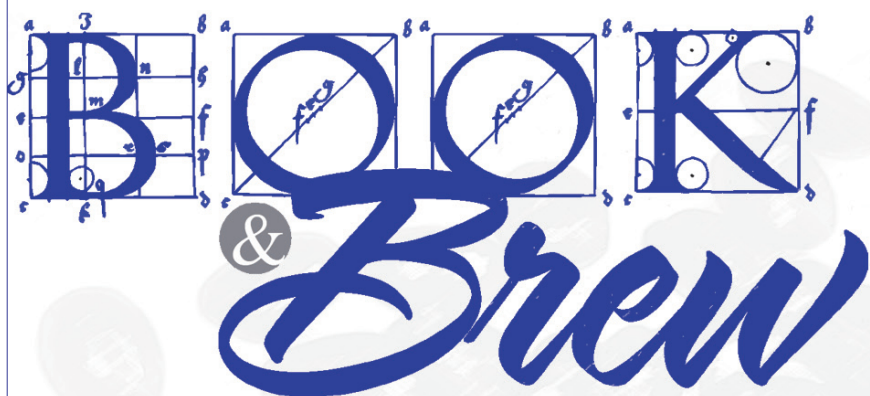
Robert Carlson
BSc Mech Eng '96
 Vice President Finance and Treasurer
 CoorsTek, Inc.



Bill Wilson
Met E. '65
 President and Chief Operating Officer
 New Horizon Uranium Corporation



Lauren Evans
BSc Geol Eng '81
 Founder and President
 Pinyon Environmental Engineering
 Resources



at Arthur Lakes
 Library



...Get Your Coffee On

- Hormone-free Milk
- Do you work on Campus on Saturdays? You can now get your AFPP (afternoon face plant prevention) at the Book & Brew from noon - 4:00PM
- Also open Sundays 1:00-9:00PM

- PROUDLY SERVING
 ALLEGRO COFFEE & TEA
- ORGANIC ESPRESSO DRINKS